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FREQUENCY OF INTERNAL HEMORRHOIDS IN PATIENT WITH LOWER GASTROINTESTINAL BLEEDING UNDERGOING COLONOSCOPY

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Abstract:

Objective: *To determine the frequency of internal hemorrhoids in patients presented with lower gastrointestinal bleeding undergoing colonoscopy.*

Patients And Methods: *The six months cross sectional study was conducted from 16 November 2011 to 15 May 2012 in the department of Gastroenterology, Liaquat National Hospital, Karachion patients presenting with lower gastrointestinal bleeding. History, examination and investigations were carried out. Then Lower gastrointestinal endoscopy was performed. Patient's information was recorded on proforma and analyzed by using SPSS-17.0.*

Results: *Total 203 patients were explored and the mean age of the patients was 43.06 ±12.05 years (95%CI; 41.40 to 44.73). Out of 203 patients, there were 111 (54.7 %) males and 92 (45.3%) females, with 1.2:1 male to female ratio. Out of 203 patients, hemorrhoids was present in 76 (37.4 %) patients and it was the most common cause of lower GI bleed. Out of 76 patients, 35 (46.05%) were male and 41 (53.94%) were females. 60 (78.94%) patients had bright red colour while 16 (21.06%) patients had maroon colour blood.* 24 (31.57%) patients had mild, 44 (57.89%) patients had moderate while bleeding severity was severe in 8 (10.52%) patients. *Hemorrhoids were more prevalent in age group between 31 to 50 years of age*

Conclusion: *The frequency of internal hemorrhoids in all patients with lower gastrointestinal bleeding undergoing colonoscopy is high.*

Key Words: *Lower GI Bleeding, hemorrhoids, Lower GI Endoscopy.*

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INTRODUCTION:

Lower gastrointestinal bleeding (LGIB) is the bleeding from distal to ligament ofTrietz& presents as bleeding per rectum.[1,2]The acute colonic bleeding usually less severe and self limiting in some individuals but if severe or massive can be life threatening and responsible for mortality.[3-5]The common factors responsible for acute lower GI bleeding are non-steroidal anti-inflammatory medication and advanced age and use of non-steroidal anti-inflammatory (NSAID) drugs.[6-7]Diverticulae, angiodysplasia, malignancies, colonic inflammation, ischemic lesion, hemorrhoids and inflammatory bowel disease are common etiologies for LGIB word wide. In a study done in Pakistan showed that the annual incidence of LGIB has been estimated to be 20% and mortality as 11%.[2]Hemorrhoids are varicosities of the venous plexuses in the walls of the anal canal and lowermost 1.5-2 cm of the rectum. Internal hemorrhoids exist above the anal canal and the external are usually found beneath the skin and around the anus.[8]Haemorrhoids may present with bleeding, prolapse, pain, discharge and itching. The diagnosis of haemorrhoidal disease is made by proctoscopy, which allows confirmation in all cases. Internal hemorrhoids are classified into first, second, third, and fourth degrees, according to the size and amount of prolapse within the anal canal.[9, 10]Haemorrhoidal grade is useful for therapeutic assessment,[11]worldwide, the prevalence of symptomatic hemorrhoids is estimated at 5% of the general population.[12]Rationale of this study is that, although internal hemorrhoids are traditionally considered as the major cause of LGIB, no local study specifically addressing internal hemorrhoids has been reported. Therefore this study provides the burden of disease in patients with LGIB, which in turn can be utilized for planning purposes.

PATIENTS AND METHODS:

The six months cross-sectional study was conducted in Department of Gastroenterology at Liaquat National Hospital, Karachi. The inclusion criteria were age between 18-65 years, either gender, all patients with history of bleeding per rectum since six monthswere recruited while the exclusion criteria were subjects with inflammatory bowel disease, cirrhosis, bleeding diathesis, previous history of haemorrhoids, history of surgery for the haemorrhoids, antiplatelet and anticoagulant, history of abdominal trauma, history of colonic cancer, family history of colon cancer, presence of weight loss and lower GI bleed secondary to upper GI causes.

The lower gastrointestinal bleeding:Blood loss per rectum (hematochezia) in the form of maroon or bright red blood or blood clots.

The Internal hemorrhoids: Visualization of dilated veins above dentate line in lower rectum during colonoscopy procedure on retroflexion maneuver.

All risks and benefits of colonoscopy were discussed with each patient and a written consent will be taken from the patient for inclusion in the study before the commencement of colonoscopy. All colonoscopy was carried out in a single visit. All procedures were performed by gastroenterologist fellows and consultants, fellows having at least two years experience in performing colonoscopies and were observed by a consultant having at least five years experience in colonoscopies. Finding was include the colour of bleeding and presence or absence of internal hemorrhoids. A structured performawas used and the data was collected on that prescribed proforma by the principle investigator.

Data will be analyzed in SPSS 17. Frequency and percentage was computed for qualitative variables like gender, colour of bleeding and hemorrhoids presence.To compare colonoscopic findings with colour of bleeding and other variables the chi square test was applied& the p-value ≤ 0.05 waslabeled as significant.

RESULTS:

Total of 203 subjects presented with lower gastrointestinal bleeding and underwent colonoscopy for presence of hemorrhoids and other findings. The mean age of the patients was 43.06 ±12.05 years (95%CI; 41.40 to 44.73). Out of 203 patients, there were 111 (54.7 %) males and 92 (45.3%) females, with 1.2:1 male to female ratio while the results are presented in Figure 1-5.

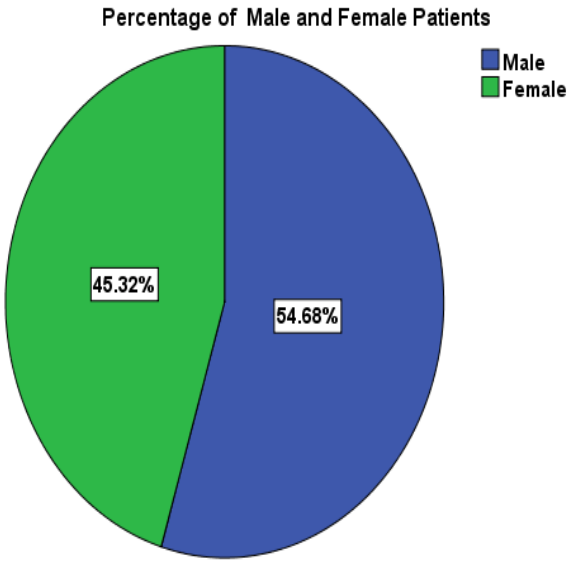
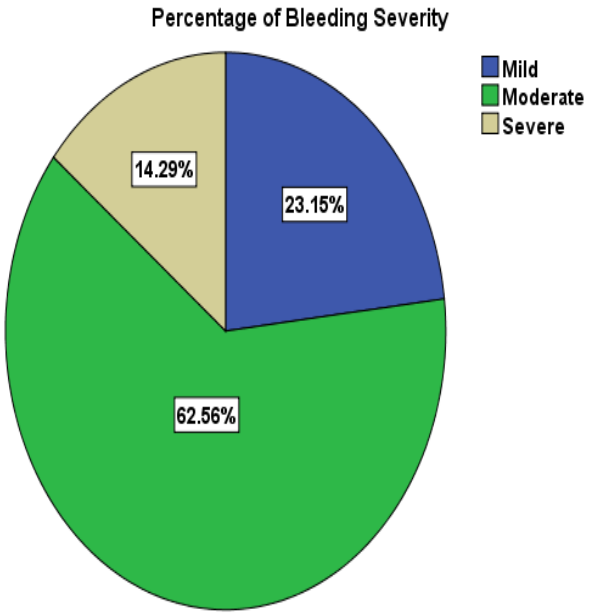


FIGURE : 1



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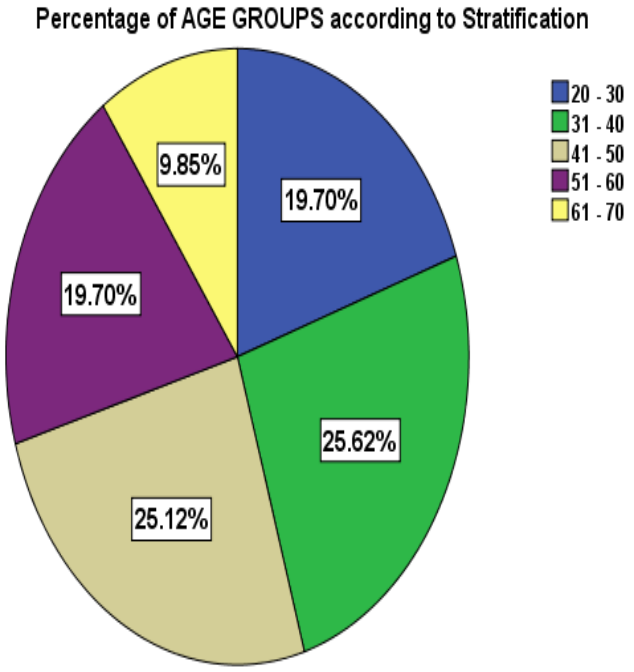

FIGURE : 2

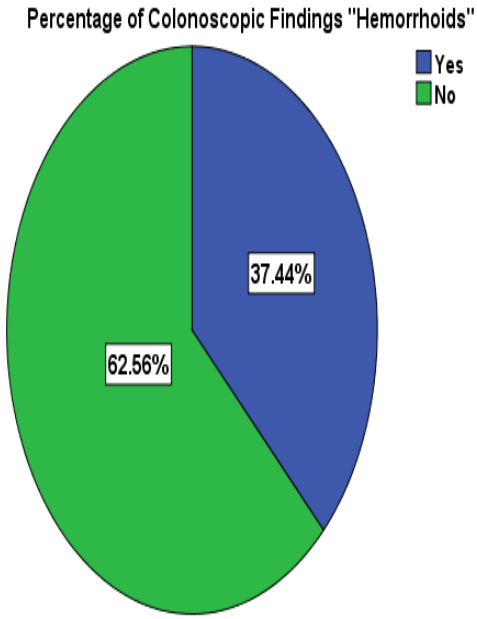

FIGURE: 4

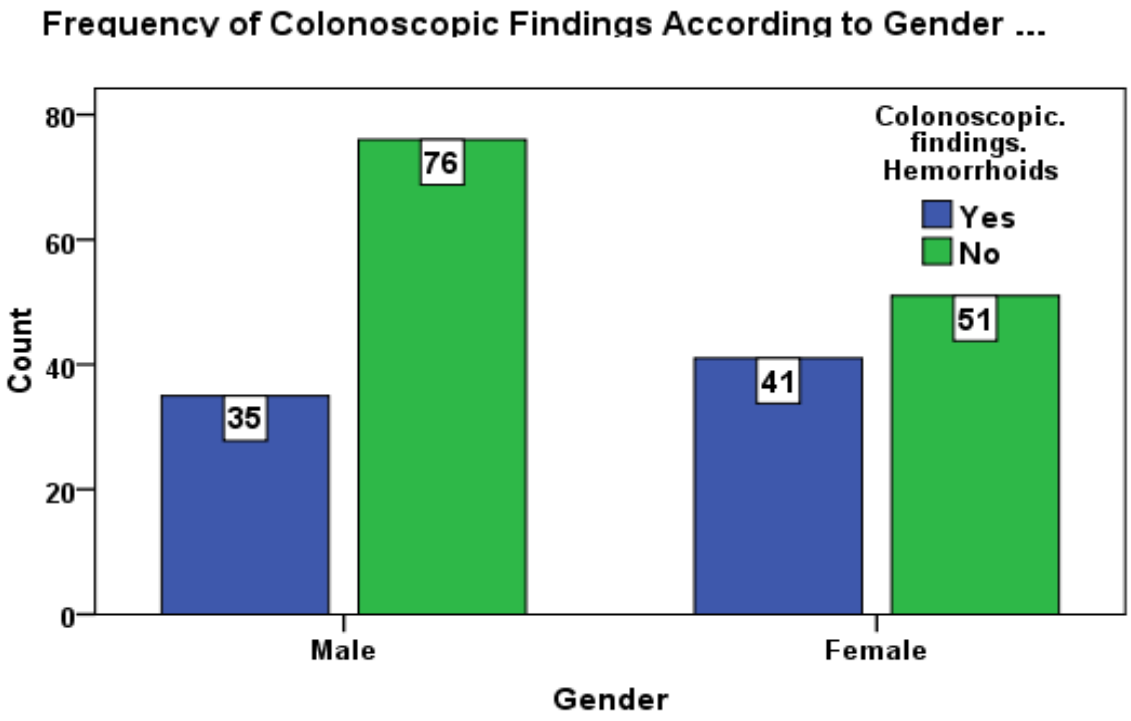

FIGURE: 5

DISCUSSION:

The annual incidence for the rate of lower GI bleeding varies from 20.5 - 27 cases per 100,000 adult population at risk (0.03%) in the US.[1]Johanson JF *et al*, evaluated anylysis of 4 centers in US. and UK shown that prevalence rate of hemorrhoids is 4.4%.[1]In our country different etiologies of bleeding per rectum, which differ from western world and raised the need for descriptive studies to reflect the true magnitude of the disease. The common etiology for bleeding per rectum in entire agegroups and in published series are hemorrhoids, rangingfrom 27 to 72%according to various authors.[13,14]In earlier study 55% of patients had demonstrable hemorrhoids.[15] In regards to acuteness and severity of bleeding per rectum a study shown that Internal hemorrhoids were responsible for severe bleeding per rectum in 14.2%,[16] and Zuckerman et al in 1999 showed that haemorrhoids are the source of acute bleeding per rectum in 2–9% of patients.[17]In our study, 37.4% individuals presented with bleeding per rectum and had haemorrhoids.A former study demonstrated haemorrhoids followed by fissure-in-ano in entire age &gender.[18]In present series the male to female ratio was 1.2:1, which was similar to other studies as Van Rosendaal, et al[19] had 1.2:1 and ShennakMM, et al[20] had 1.34:1 male to female ratio respectively. In present study the haemorrhoids (37.4%) are predominant factor for bleeding per rectum and is consistent with the study by Rhee and Lee.[21] In present study, patients with alarm symptoms other than per rectal bleeding (i.e history of weight loss, prior history or family history of colonic cancer) were excluded and I found that internal hemorrhoids was the commonest cause of bleeding per rectum especially in age group of 30-50 years. Internal hemorrhoids can be easily diagnosed by anoscopy (proctoscopy). So it is advisable that in developing countries where cost is a major issue, proctoscopy should be first investigation of choice in younger patients and patients having no alarm symptoms. Sigmoidoscopy and colonoscopy should be reserved for elder patients and for those having alarm symptoms. In our country, no local study specifically addressing hemorrhoids has been reported. A better understanding of the natural history of LGIB would allow identification of the exact frequency of internal hemorrhoids;therefore this study provides the burden of disease in patients with LGIB, which in turn can be utilized for planning and health strategic management purposes.

CONCLUSION:

Lower gastrointestinal bleeding is associated with significant mortality & morbidity. The frequency of internal hemorrhoids in subjects with lower gastrointestinal bleeding undergoing colonoscopy is high.

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